

Note: Diagonal Bracing Not Shown

Purlins
Roofing
Lateral Brace
Truss
Bottom Chord Braces
Siding
Post
Spaced Girders
Truss Span

NOTE: Truss Span measured from outside edge of outside girder, use when ordering trusses and setting posts.

Cross-bracing
2x4 braces for 4' Truss Spacing
2x6 braces for 8' Truss Spacing
Locate cross-bracing in center of truss
Trusses
Girder
Post

16'
32' MAX.

Roof Slope = $\frac{12}{12}$

TRUSS SPAN =

ROOF COMPONENTS

TRUSS SPAN = _____

TRUSS SPACING = _____

POST SPACING = _____

PURLIN SPACING = _____

TYPE OF ROOF = _____

For 4' Truss Spacing 2"x4" Purlins may be laid flat

2"x4" PURLINS (on edge) at 24" o.c. max. or Roof Manufacturer Requirements
30d nails + 1/2" bolt
1'-0" Overhang
2"x10" GIRDER
2"x12" GIRDER OVER GATE OPENINGS
6"x6" POST
2"x6" LATERAL BRACE
SPACER BOARD
30d nails
12d nails
TRUSS
3 MIN.
12
1
1

POST TO TRUSS (LATERAL) BRACING

Use Tie-down Blocks when trusses are on 4' spacings and posts on 8' spacings
Tie-down Block
Use Dimension Lumber or Stub Post
1/2" bolt
12d nails
30d nails
30"
30"
2"x6" KNEE BRACE
Brace may split girders
6"x6" POST
SPACER BOARD
30d nails

KNEE BRACE DETAIL

DIAGONAL BRACING

TYPICAL TRUSS

1. **Lateral bracing** fasten the truss to the post and stiffen the walls laterally across the building width. Fasten brace as shown in detail. Note that the brace extends to the upper chord of the truss.

2. **Diagonal bracing**, also called cross bracing, keeps trusses vertical and prevents the truss from buckling from wind loading. Install bracing at each end of the building and at intervals shown in detail. Diagonally brace ends of buildings more than 18' wide or 8' high.

3. **Bottom chord bracing** replaces a ceiling and prevents buckling of the bottom chord. Install 2x4's continuously the entire length of the building.

4. **Knee bracing** will be used when truss spacing does not match post spacing and on posts by gate openings.

5. **Fasteners**—Special nails or screws with sealing washers are used to fasten metal roofing. Only buy fasteners designed for this use and follow manufacturer's application instructions.

6. If building your own trusses obtain a professional design or equivalent.

7. An min. equivalent roof design shall provide for a uniform load to meet the county code or 25psf, which ever is greater.

8. ALWAYS FOLLOW MANUFACTURER'S RECOMMENDATIONS.

ROOF ASSEMBLY DETAILS FULL TRUSS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

DESIGNED	DATE	APPROVED BY	DATE
D FAUBER	3/95	TITLE	
DRAWN		CONST. APPROVAL	
TRACED		TITLE	
CHECKED		DATE	

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